Opening Statement of the Honorable Tim Murphy Subcommittee on Oversight and Investigations Hearing on "U.S. Public Health Preparedness for Seasonal Influenza: Has the Response Improved?" November 19, 2015

(As Prepared for Delivery)

Good morning. Earlier this year, in February, this Subcommittee held a hearing on last year's flu vaccine mismatch. This mismatch to the predominant flu virus resulted in more deaths and hospitalizations because of the vaccine's lower than usual effectiveness. Today, we are returning to that issue to discuss what our public health agencies have learned in the intervening months. I want to thank the Ranking Member for her assistance in this important topic. We have worked closely on this issue, sending bipartisan letters and receiving briefings, not only on this year's flu vaccine, but also on our broader response to seasonal and pandemic flus.

Influenza is a leading cause of death in the United States, especially in a severe flu season. Each year, millions of Americans receive flu shots to help protect against the illness. Getting a flu shot is important—even in a bad flu season the vaccine can reduce the symptoms and duration of the flu. I encourage everyone who has not already received a flu shot this season to get one, even if the vaccine is not perfect.

Last year, the United States experienced a severe flu vaccine mismatch. Public health officials designed the vaccine based on information available in February, but the virus mutated before the flu season began, resulting in an effectiveness rate of only 19 percent for the vaccine, and even lower for senior citizens. We have learned, however, that even in a good year, the effectiveness of the vaccine is lower than it should be. In four of the last ten years, the flu vaccine effectiveness rates fell below 40 percent. It is clear that the seasonal flu can cause severe public health impacts on the same scale as a pandemic flu. The time for an updated approach to dealing with the flu has long passed.

The Committee's oversight work has made a difference. The Department is now treating the seasonal flu as a higher priority. Tools and plans typically reserved for pandemic flu situations are being considered in the fight against the seasonal flu. An HHS influenza working group has compiled thirteen issues and recommendations to improve the influenza vaccine development and manufacturing process. They are working to improve surveillance, utilize technology to speed vaccine production, and make more effective vaccines.

But there is still much work to be done. The issues surrounding the flu vaccine are not new—we are still largely manufacturing flu vaccines and detecting flu virus changes with technology developed during the 1940s. At the same time, more and more new influenza viruses are emerging each year. Increases in travel and trade make it easier than ever for these viruses to spread. Our current system is not as responsive and effective as it should be.

The system is badly in need of modernization, and must better capture advances in technology over the past decades. We need better testing to quickly learn of mutations in seasonal influenza viruses. We must increase our capacity to create cell-based and recombinant vaccine doses, instead of heavily relying on the more problematic egg-based vaccine doses. The

estimated production time for cell-based and recombinant vaccines is significantly quicker than egg-based vaccines, allowing for greater flexibility in the vaccine selection and manufacturing process.

NIH, the Biomedical Advanced Research and Development Authority (BARDA), and other agencies undertaking research into influenza and the flu vaccine must determine what precisely is limiting vaccine effectiveness, particularly with respect to the dangerous H3N2 seasonal flu strains. We must also better understand how to use adjuvants to boost the effectiveness of the vaccine, particularly among high-risk populations such as the elderly and the young.

We need a better contingency plan for vaccine mismatch issues, whether due to antigenic drift or egg adaptation issues. The public health organizations must increase surveillance, particularly in the southern hemisphere, so we can know as early as possible when a seasonal flu vaccine will not be as effective as we hope.

The CDC must have a more robust and effective communications strategy when dealing with the flu. In particular, health care professionals must be better educated about the use of antivirals instead of antibiotics when treating the flu. The CDC must also come up with a better plan to increase vaccination rates.

Finally, HHS must prioritize updating its pandemic plans, some of which have not been updated for over a decade. These updates—which are now not expected until sometime next year—are long overdue.

I am encouraged by the work that has been done in the wake of last year's flu season. But we must also ask ourselves where we are falling short and what we need to do to modernize our response to influenza. Our nation deserves a twenty-first century response to this problem.

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